

# ***Natural Healthcare College***



***Making eating a pleasurable experience***

My aim for this short e-booklet is to help demystify nutrition and to make it 'user friendly'. Much of the material you'll find in these pages comes from the Natural Healthcare College's 'Naturopathic Nutrition' course. The course is packed full with information that enables the college's graduates to offer efficient and effective recommendations and to support members of the public on a whole range of topics, such as weight control, fatigue and general low energy, low immunity and digestive upsets. In today's Western society, many health concerns are the result of just two basic problems, one is poor digestive chemistry and the other is blood sugar imbalance and I'll briefly discuss both of these a little later.

We're giving well-meaning advice that we should eat 5 of more pieces of fruit or vegetables daily, and generally avoid fats, as well as keep alcohol to a minimum. Essentially there's nothing wrong with that information but many people **are** eating 5 of more pieces of fruit or vegetables daily, and they are generally avoiding fats and alcohol, but still they don't function at an optimal (healthy) level and they don't understand why.

So let's make eating a pleasurable experience!

### **What's so scary about nutrition?**

With so much contradictory and sometimes confusing information, it's little wonder so many people worry about what they should, and shouldn't, eat. Many people are so 'frightened' that a Nutritional Therapist is going to be some sort of ogre that it can take them months to pluck up the courage to make an appointment, and some people are so 'turned off' by the fear of having their domestic and social lives ruined that they never make that all important appointment.

If you're unfamiliar by what I mean by 'the naturopathic approach' to nutrition, I'll try to explain. Naturopathic practitioners have specific aims and **Naturopathic Nutrition** is the practice of nutrition within the context of naturopathic medicine. It incorporates respect for the traditional naturopathic approach to nutritional therapy and recognition that:

- Individuals have a unique interaction with nutrients – because of biochemical individuality, no two people are the same (more on this later)
- Food selection, preparation and eating is a healing art – this dates back to the time of Hippocrates (the father of medicine) who stated "Let food be your medicine and let medicine be your food"
- Whole foods are greater than the sum of their parts – so it's going to be more nutritious to eat unprocessed foods.

The practice of Naturopathic Nutrition may include appropriate recommendations and advice on:

- Individually assessed dietary therapy
- Optimal food preparation
- Traditional approaches to detoxification
- Lifestyle recommendations to optimise dietary therapy
- Full and clear information that empowers and encourages each individual to achieve optimal health and well-being

Above all, a naturopathic practitioner will be a teacher. It's no good **telling** people what they should or shouldn't be eating if they don't understand why these recommendations are likely to be beneficial. We're all likely to respond to advice better if we understand why what we've been doing may not work for us so the aim of a Naturopathic Nutritional Therapist is primarily to 'educate' – it certainly should be to give orders or instructions.

When offering advice a Naturopathic Nutritional Therapist should be prepared to negotiate to achieve optimal compliance; a diet must be appealing, manageable and achievable for each individual – the more that's asked, the less chance there will be of compliance.

## Biochemical Individuality

Why does a diet that works brilliantly for one person not work for another? Biochemically we are unique, thanks to our genetically inherited characteristics. Our internal organs are different sizes, we produce different enzymes and we have individual dietary needs.

A person might eat all the best and highest quality organic food, exercise regularly, drink adequate water, get sufficient rest and take the finest supplements, but may still not feel well or enjoy optimum health. The reason might be the wrong nutrient balance for that person.

Cells of the body 'know' how to perform but unless the genetically required raw materials are available at the right place, at the right time, and in a form that can be used, inefficiency at a cellular level will result. As cells lose the ability to produce adequate energy, they also lose their ability to repair and rebuild tissue. This can lead to problems such as a toxic internal environment that can influence the efficiency of all organs and systems of the body. With adequate available energy, cells can fulfill their genetic roles enabling them to repair, rebuild and reproduce efficiently.

## What is 'good health'?

Good health may be simply defined as freedom from disease. This differs from fitness, which is more related to an individual's ability to cope with day to day demands. We could then add performance; it is possible to perform well even though not experiencing optimal health at the time e.g. athletes who perform well even though suffering from a cold. From this, it can be seen that it is perfectly possible to be healthy, though not fit.



Fitness suggests stamina, which in itself requires a degree of strength and suppleness. To be fit, ideally all three criteria should be achieved. Playing a particular sport regularly may make a person good at it but it does not necessarily fulfill all three aspects. It has been suggested that the following five aims should be met every day:

- Turn and twist joints to their near maximum range of motion
- Stand for at least two hours
- Lift something heavy for five minutes
- Increase your heart rate to 120 beats per minute for at least three minutes
- Burn up at least 300 calories in physical activity

Repetition of any particular exercise, or the speed at which it is carried out, will not necessarily achieve these aims. Exercise, and stress, will increase the heart rate though when a person is fit, their resting heart rate will be lower and will rise more slowly when they do exercise. For a reasonably healthy person, when first starting to exercise the aim should be to gradually to raise the heart rate to 160 beats per minute, minus the age of the person i.e. a 40 year old should aim for 120 beats. This can gradually be increased to 220 beats minus the age. If an individual has health problems, smokes heavily or is significantly overweight, appropriate advice should be given by a GP. If exercising causes any adverse reactions such as light-headedness, difficulty breathing, pain in the chest, a GP should be consulted.

The average resting pulse is around 72 – 76 beats per minute for men and slightly higher for women; children, depending on the age, may have a resting pulse of between 80 – 90 beats. Generally, the lower the resting heart rate, the healthier you are. The type of exercise chosen to increase the pulse rate is not particularly relevant. Many day-to-day routines can take care of most of the five aims e.g. carrying heavy shopping, climbing stairs, walking. Yoga and Tai Chi are excellent ways to improve the body's suppleness.



## Meal planning

When thinking about diet, it is important to understand that it should be considered as a long-term eating plan and not a quick-fix. 'Simplicity' was the keyword of Dr Edward Bach, who developed the Bach Flower Remedies. It's a word I frequently use when teaching students and it should be uppermost when a practitioner gives nutritional advice because most people are looking for that 'magic pill' and the realisation they have to take responsibility for their own health can come as a bit of a shock, so advice should be kept simple and achievable on a daily basis.

Earlier I referred to 'blood sugar balance', or perhaps more relevant these days is blood sugar 'imbalance'. In many cases there may be no need to look further than this as correcting this imbalance, along with advising on potential additional facts such as lifestyle, toxicity, or vitamin and/or mineral imbalance, is likely to be a major help to many people. To enable us to have stable blood sugar, we need to eat a balanced diet. You'll perhaps notice that I haven't said 'eat a **healthy** diet' – balance is the key word here and that balance needs to come from carbohydrates, proteins and fats.

## Carbohydrates

Glucose is essential to the body, it is our main source of fuel (energy) and we obtain it from eating carbohydrates. Glucose levels in the blood fluctuate all the time. If glucose is not needed to create immediate energy, the body senses the excess and triggers the release of insulin from the pancreas. Through a series of biochemical changes, insulin encourages the storage of excess glucose in the liver, muscles and ultimately as body fat. Understanding the speed at which different foods are broken down into glucose for the body to use as fuel is essential for optimal energy, weight and general health.

Simple carbohydrates are quickly converted into glucose once they are digested, while protein and complex carbohydrates taken longer. Simple carbohydrates are what we get from most processed foods – because the 'raw' ingredients have already been processed, it takes little time for the body to break them down into whatever nutrients they're still able to provide (many of the nutrients will have been stripped during the processing). The Glycaemic Index (GI) measures how high and how quickly blood glucose levels are likely to rise after carbohydrates have been digested. By eating foods that have a slow conversion rate (a low GI value), the body will be able to receive a steady supply of energy and it can help prevent an excess of glucose to energy requirements, which would lead to glucose being stored as body fat. Carbohydrates that are low in fibre are quickly converted into glucose, creating a surge of energy but energy levels fall just as quickly, triggering hunger, leading to the consumption of more carbohydrates, more insulin and ultimately to more weight gain.



Complex carbohydrates have their fibre intact; their natural form has often not been changed, or if it has then it is by a small amount. In contrast, simple carbohydrates have been processed into refined products and the fibrous content has been lost in the processing. As an example, if wheat grain is very lightly processed to produce wholemeal bread, it remains a complex carbohydrate but if the grain is polished even more then it becomes a refined product as used in white bread. The same applies to white and brown rice, and white and brown (wholemeal) pasta.

Most people think of carbohydrates as potatoes and bread, i.e. starchy foods; in the majority of cases they will be unaware that all grains, vegetables and fruits are also carbohydrates. Vegetable complex carbohydrates are usually dense in texture, e.g. broccoli, carrots and green leafy vegetables. Some fruits would more accurately be classified as simple carbohydrates if their fibrous content is quite low so there will be relatively little fibre to slow down the conversion of the fruit to glucose; a good example would be a banana which is rapidly converted into glucose, though we should not overlook its good content of nutrients

such as potassium. A number of fruits are quite high in sugar so they will rapidly be converted into glucose (blood sugar); watermelon, honeydew melon and grapes fall into this category – while many manufacturers are trying to avoid showing ‘sugar’ on a product label, in many cases the sweetener is grape juice, i.e. highly refined grapes! Apple juice is classified as a simple carbohydrate because the processing has broken down its fibre, while a whole apple is a complex carbohydrate. Alcohol also counts as a simple carbohydrate.

Rather than trying to remember the individual GI or GL of every food, or needing to refer to a reference chart, it is easier for most people to learn to combine the right proportions of proteins and fibrous vegetables for every meal and snack. While we think of fruits and vegetables as being healthy, most people overlook the fact they are carbohydrates so in trying to prepare a ‘healthy meal’ many people will include too many vegetables and will follow it up with fruit as a dessert; this combination is likely to trigger a surge of insulin, potentially leading to lethargy and weight gain. By choosing the correct proportions of complex carbohydrates and proteins in each meal or snack, it will help to reduce the frequency of insulin production, promote good digestive health, energy, well-being and optimal weight.

Complex carbohydrates should ideally make up approximately 60% of the meal, including both starchy carbohydrates such as brown rice, jacket potato or wholemeal pasta, and complex vegetable carbohydrates. Although whole wheat pasta with a tomato sauce may be conceived by many as a healthy option because there are no simple carbohydrates, the meal contains no protein and the fibre content is quite low. Nutritionally this meal would provide in the region of 0% protein, 90% complex carbohydrate, of which starch represents about 80% and vegetables 10%; vegetable fat would make up the remaining 10%. Pasta is often eaten in quite large quantities and even wholegrain varieties can rapidly affect blood sugar.

### **Fat metabolism**

The body sees fat as the fuel for survival; it is the richest source of energy, containing the highest calorie count of any food, which is why many diets advocate limiting fat intake. When we eat fat a neuropeptide called **galanin** is produced, increasing our desire to eat more fat. It is this biological respect for fat that makes it hard for people to defeat fat cravings – we have a basic instinct to eat fat. It may explain why when we eat a fat-laden cake, a good many people will want to eat more. It has been suggested galanin levels are increased when we go without eating for a period of time and this may explain why there could be a tendency to crave fat-rich foods.

Some fats are essential for health and their conversion into substances the body can use is dependent upon several enzymes, which themselves require specific vitamins, minerals and proteins in order to function efficiently. Even non-essential fats have a role to play, although saturated fats are not required in large amounts. Cold-pressed vegetable oils are the best options for salad dressings and marinades. Avoid heating the oils to high temperatures as that will damage them and result in the production of oxidants. For vegetarians and vegans, nuts, seeds, olives and avocados can all be integrated into the daily diet. You’ve probably heard about the essential fatty acids called Omega-3 and Omega-6. They’re called ‘essential’ because the body needs them but unlike some enzymes and hormones it can make for itself, it can’t make the essential fats. For non-vegetarians these foods should still make up the bulk of fats in the diet but oily fish is the most reliable source of the Omega-3 fats called EPA and DHA. Nuts and seeds, avocados and vegetable oils are common sources of Omega-6 essential fatty acids. We need both Omega-3 and Omega-6. Processed foods tend to be high in ‘damaged’ Omega-6 so when thinking in terms of good health we should be aiming to eat ‘good’ (unprocessed) sources such as those I’ve just mentioned.

### **Protein metabolism**

Perhaps the starting point for every meal or snack would be to ask 'Where is the protein on this plate?' Proteins contain amino acids – the building blocks of the body, being essential for renewal and replacement of cells. The eight essential amino acids can't be made by the body so must come from the diet. These essential amino acids contain complete proteins, i.e. they contain all the elements the body needs to create the remaining amino acids. Examples of complete proteins include fish, nuts, eggs, quinoa and tofu. The quantity of protein needed by each individual is likely to be governed by a number of individual metabolic factors but a good starting point would be to aim for approximately 30% of the food on the plate coming from good sources proteins. Because we're biochemically unique, the ratio between carbohydrates, good fats and proteins is going to vary and this is where a well-trained Naturopathic Nutritional Therapist can help to get the balance right.

### **Eat at regular intervals**

While individual biochemistry will influence how often each of us needs to eat, many people will fare better by eating appropriate meals and snacks at regular intervals throughout the day. This is likely to mean it is best to eat little and often. Eating just because the clock tells us it is the time we should be thinking about eating can be counterproductive if we're not hungry. We should allow one meal to have passed through the digestive process before adding more food to the load on the digestive tract. If we're not hungry, it's likely that digestive juices will not be adequately stimulated, leading to toxic residues. A 'rule of thumb' might be "Eat for what you are about to do, not for what you have already done".

When trying to keep blood sugar in balance, many people will find it beneficial to eat a balanced meal for breakfast with an appropriate snack half-way through the morning; this will help reduce dips in energy levels and symptoms associated with feelings of hunger. Have lunch and then a balanced mid-afternoon snack but be wary of eating late in the evening as food, especially simple carbohydrates, is unlikely to be required for energy production so may serve little purpose other than to be converted into body fat. The aim should be to eat before feeling hungry so that energy stores can be replenished before they dip too low.

### **Beverages**

Water is the best fluid to drink as it hydrates the body and has numerous benefits. Ideally fluids should be warm, neither too hot nor too cold – consider the effect that pouring cold water has on fatty residues in a dish, it makes them congeal and this is an undesirable effect in the stomach. Ideally we should be aiming to drink between 1.5 – 2 litres of fluid daily and if a lot of physical activity is being carried out, you're likely to need a little more than that.

Eating should always be a pleasurable experience and for many people that experience will include alcohol. Although alcohol is a simple carbohydrate, having a rapid influence on blood sugar, we need to accept that for many people alcohol is a part of their life, and a social pastime. Ideally it would be best to limit alcohol to no more than three times a week, and then to limit intake to no more than two small glasses of wine, or two measures of spirits. Wine is likely to be the best choice, but preferably not the sweet wines. Remember too that mixer drinks may be highly sweetened, and non-sweetened products may contain artificial sweeteners such as aspartame, which can have negative effects on some people. Drinks such as cider, beer and lager are usually high in sugar.

Many people would find it hard to start the day without either a cup of coffee or tea. Both can add to blood sugar irregularities, even decaffeinated varieties as they contain other stimulants (just not caffeine), but as long as the drink forms part of a balanced meal, with protein and fibre, it should be acceptable in terms of blood sugar. Drinking tea and coffee more than once or twice a day can result in over-stimulation of the adrenal glands, providing short-term energy but as the levels of the hormone adrenaline drop symptoms of fatigue and hunger may develop, encouraging poor food choices. However, it's best not to drink too much with food, or immediately after eating, as it washes away saliva within the mouth.

## **Digestion**

For good digestion, chewing is essential. The more we chew, the more we secrete saliva, which is essential to healthy digestion. Saliva contains enzymes that begin the digestion process. It is also highly alkaline, preparing food for the stomach; the alkaline-based food balances the acidic environment of the stomach, helping to protect the stomach from excessive acidic conditions. If we fail to chew thorough, the stomach lacks the alkaline buffers to balance its powerful hydrochloric acid.

Although many people think they produce too much stomach acid, and hence experience a reflux, for many of these people problems are more likely to relate to a deficiency of HCl, rather than an excess. Here again chewing is important as the action triggers stomach secretions. As mentioned above, try to avoid large drinks with meals as the fluid will wash away the beneficial saliva in the mouth. And try to eat in as relaxed a manner as possible. Ancient man wasn't designed to 'eat on the hoof' or when stressed and our digestive systems haven't evolved to function optimally in a 'stressed' environment.

The importance of this stage of the digestive process should never be underestimated. The above information with regard to balanced meals and optimal intakes of fibre will help resolve many commonly encountered digestive symptoms. Various supplements are available that can help with digestive complaints and a Naturopathic Nutritional Therapist will be able to prescribe these to support the digestive system and in general these supplements can help to resolve even longstanding digestive problems.

Statistics suggest that most people regain the weight they have lost through dieting. To be successful, we should forget about the word 'diet', which suggests a short-term and possibly 'painful' experience. Instead, thinking about an eating plan for life where you don't feel deprived of food. Don't overlook portion sizes – this can make a huge difference if weight control or digestive discomfort is relevant to you.

Nutritional therapy doesn't work in isolation; sometimes we need to look at stress management and/or exercise. Research suggests that diet plus exercise helps improve numerous symptoms; exercise can help improve insulin sensitivity and cardiovascular health. Maybe you could set yourself SMART guidelines: **S**mall, **M**easurable, **A**chievable, **R**ealistic, **T**argets.

## **Relaxation**

And last but certainly not least, to help you relax, here are a few simple suggestions that could be incorporated into your day to day life.

### **Deep Diaphragmatic Breathing (the Complete Yoga Breath)**

Many people breathe with the upper part of the lungs only. This can be due to habit or tension in the stomach muscles and the diaphragm. This type of breathing can cause the following problems for the body:

- The body expels too much carbon dioxide
- The blood becomes too alkaline
- Blood vessels narrow and circulation to the brain is restricted
- Palpitations, dizziness, feeling faint and chest pains can result
- Panic attacks may occur and these can lead to hyperventilation

By learning the full diaphragmatic breathing (also known as the complete yoga breath), this cycle can be broken. Deep breathing relaxes mind and body and supplies oxygen and energy to the whole body. Be aware that people suffering from asthma may be unable initially to take in very deep breaths. In this case, simply ask the person to breathe in as much as is comfortable and safe.

Start by sitting upright in a chair or lying on the floor with head and knees supported by

cushions. Breathing slowly, using the diaphragm, chest and clavicle area, draw in, through the nose, as much air as possible, as slowly as possible. Start by first filling the diaphragm area. Place your hands on your stomach and feel it expand as you breathe in deeply. Keep breathing in slowly and fill the chest cavity and finally raise the clavicles to allow in the maximum possible amount of air. This will get an increased amount of oxygen to the brain, which it will use to burn up nutrients delivered to the body tissues. The brain will benefit from the added oxygen and will help achieve a general feeling of relaxation and well-being.

Hold the breath for a few seconds, as this will allow the lungs to use up as much of the inhaled oxygen as possible. Then, very slowly breathe out through the mouth. Empty the lungs as completely as possible to expel the maximum amount of carbon dioxide. This will leave the lungs ready to take in extra oxygen in the next in-breath. Practice this several times but stop if you feel dizzy or start to hyperventilate. Use a ratio of 2:1 when breathing e.g. breath in for 4 seconds (of 6 seconds), hold for 2 (or 3), breath out for 4 (or 6) and hold for 2 (or 3) before the next breath.

This type of breathing not only energises the whole body but by alternately expanding and contracting the diaphragm, chest, lung and shoulder area, the muscles of the upper body relax, leading to relief from tension headaches, back and neck aches and stiff shoulders. Use this type of breathing several times a day to get used to breathing correctly and also use it at the first sign of anxiety or a panic attack coming on.

### **Nadi Shodhana**

*Nadi* means nerves or psychic passage and *Shodhana* means purification. This technique helps to clear all blockages in the psychic passage so that prana (see Module One) can flow freely throughout the body. It purifies the blood system and improves immunity. It also purifies and strengthens the nervous system. The flow of positive and negative energy is balanced, harmonising the mind-body activity.

Sit in a comfortable posture and ensure the back is erect. Lower the head and rest the chin on the notch between the collar bone. Bring the right hand to the right nostril, close it with the thumb and keep the left nostril open. Inhale deeply through the left nostril and then close that nostril with the little and ring fingers. Retain the breath for a few seconds. Open the right nostril by lifting the thumb and exhale slowly, keeping the left nostril closed. Now repeat the process by inhaling through the left nostril and exhale through the right. This completes one round. Repeat two or three more rounds.

### **Agnisar Pranayama**

*Agnisar* means the essence of fire – in yoga, fire is related to heat energy, which directs the nutritive juices throughout the body. The efficient functioning of the abdominal organs is very important, otherwise the organs become inefficient and this can eventually lead to ill health.

Sit in a comfortable posture, lean forward a little and grip both knees. Exhale completely and hold the breath. Start moving the abdomen by expanding and contracting as much as possible; this will give a good massage to the internal organs. Relax the abdomen and inhale slowly and gently. This exercise can be repeated an average of two or three times.

And finally, I hope you've found the information in this e-booklet helpful; essentially though it's just a 'snapshot' of what Naturopathic Nutritional Therapy has to offer. If you'd like to find a practitioner, please go to the website of the Naturopathic Nutrition Association at [www.nna-uk.com](http://www.nna-uk.com). If you'd like to find out more about the Natural Healthcare College's course, please visit [www.naturalhealthcarecollege.com](http://www.naturalhealthcarecollege.com), send us an email at: [info@naturalhealthcarecollege.com](mailto:info@naturalhealthcarecollege.com) or give us a ring on 01837 840108.

Wishing you a healthy future

*Jackie Day*